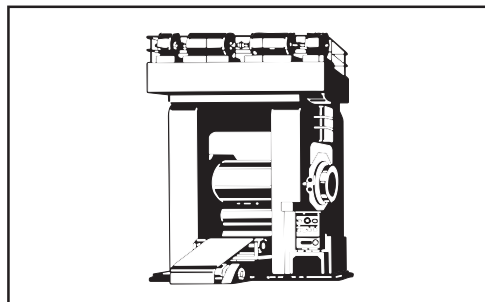
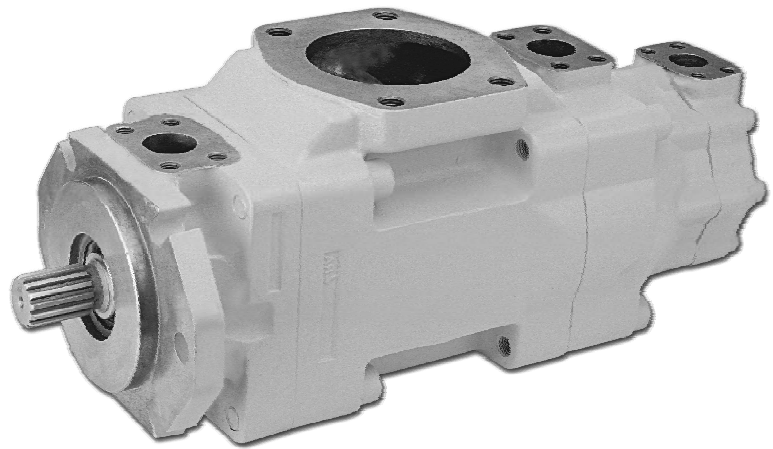
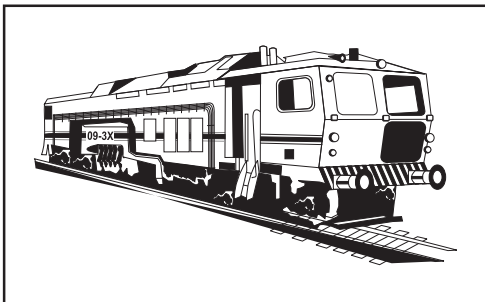
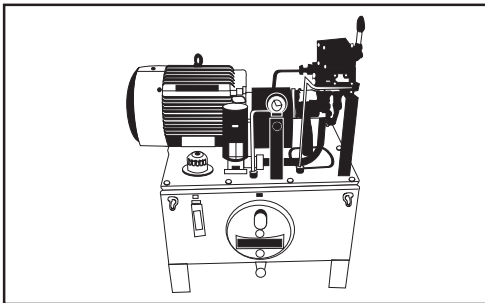
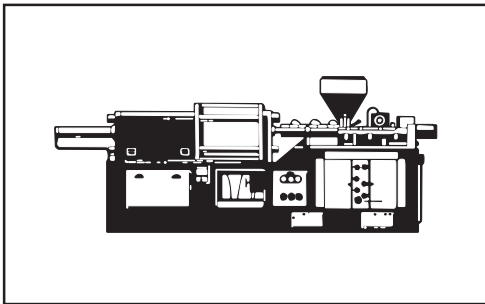


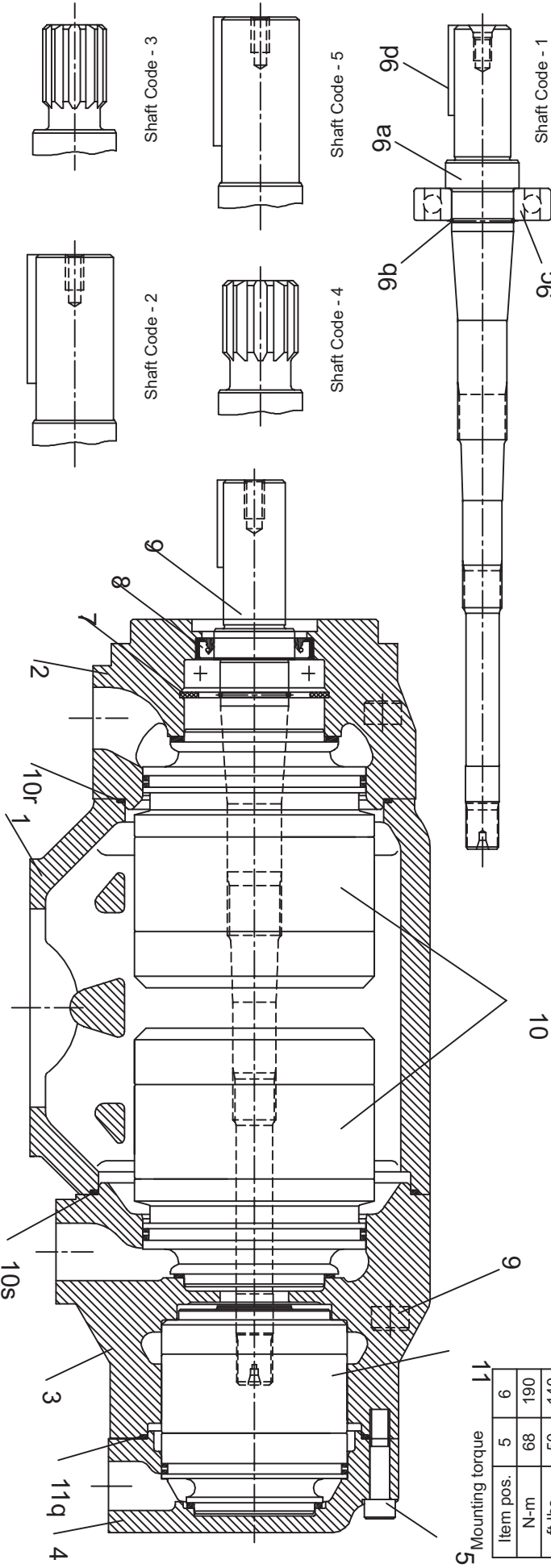


# **VT6DDCS**

## **Triple vane pump**



Bold printed are recommended repair kits and assemblies



5 Mounting torque

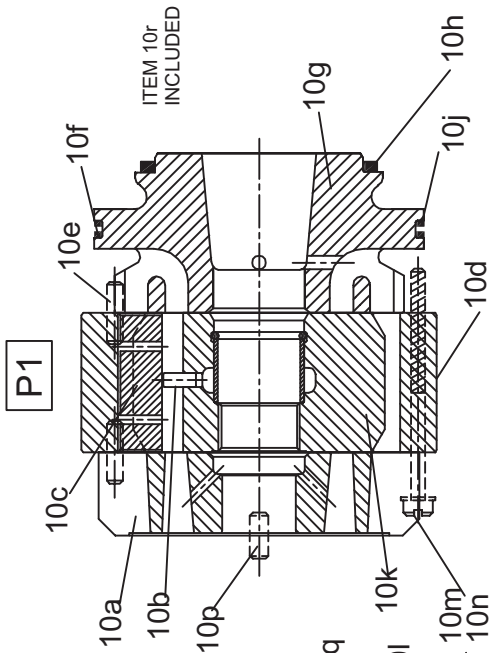
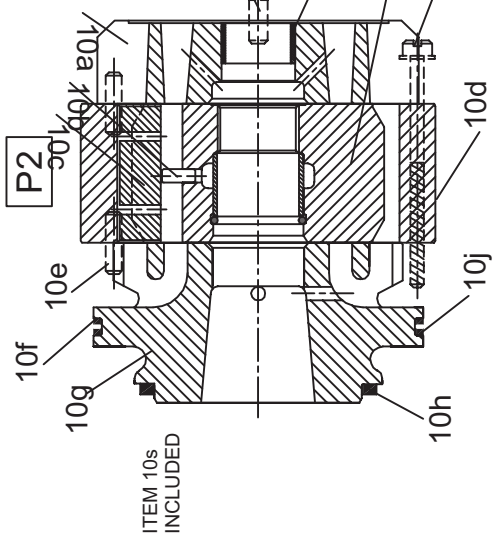
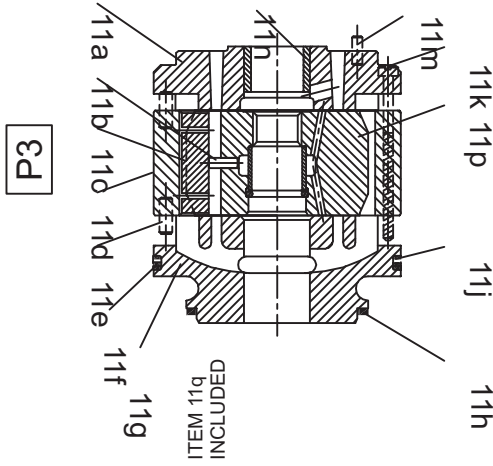
|           |    |     |
|-----------|----|-----|
| Item pos. | 5  | 6   |
| N-m       | 68 | 190 |
| ft-lbs    | 50 | 140 |

| Item pos. | Description                      | Part No.    |  | Qty |
|-----------|----------------------------------|-------------|--|-----|
|           |                                  | VT6DDCS     |  |     |
| 8         | Shaft seal (S1-0.7 bar)          | V620-82064  |  | 1   |
|           | Shaft seal (S4-S5-7 bar)         | V620-82072  |  |     |
| 9         | Shaft and bearing ass'y (Code-1) | VS24-72358  |  | 1   |
|           | Shaft and bearing ass'y (Code-2) | VS24-72359  |  |     |
|           | Shaft and bearing ass'y (Code-3) | VS24-72360  |  |     |
|           | Shaft and bearing ass'y (Code-4) | VS24-72361  |  |     |
|           | Shaft and bearing ass'y (Code-5) | VS24-72362  |  |     |
| 9a        | Shaft (Keyed) (Code-1)           | C-034-03158 |  | 1   |
|           | Shaft (Keyed) (Code-2)           | C-034-03159 |  |     |
|           | Shaft (Splined) (Code-3)         | C-034-03160 |  |     |
|           | Shaft (splined) (Code-4)         | C-034-03161 |  |     |
|           | Shaft (Keyed) (Code-5)           | C-034-03162 |  |     |
| 9b        | Round section ring               | V034-70853  |  | 1   |
| 9c        | Ball bearing                     | V230-00207  |  | 1   |
| 9d        | Key (Code -1)                    | V034-46754  |  | 1   |

| Item pos. | Description                  | Part No.     |  | Qty |
|-----------|------------------------------|--------------|--|-----|
|           |                              | VT6DDCS      |  |     |
| 1         | Housing (UNC)                | C-034-03163  |  | 1   |
|           | Housing (Metric)             | C-034-03164  |  |     |
| 2         | Mounting flange (UNC)        | H-034-67343  |  | 1   |
|           | Mounting flange (Metric)     | H-034-67342  |  |     |
| 3         | Port block (UNC)             | H-034-66812  |  | 1   |
|           | Port block (Metric)          | H-034-66783  |  |     |
| 4         | End cap (UNC) (P3 = 3/4")    | V034-66523   |  | 1   |
|           | End cap (UNC) (P3 = 1")      | V034-48579   |  |     |
|           | End cap (Metric) (P3 = 3/4") | H-034-66765  |  |     |
|           | End cap (Metric) (P3 = 1")   | H-034-71327  |  |     |
| 5         | Mounting Screw               | V361-11264-3 |  | 7   |
| 6         | Mounting Screw               | V361-14324-3 |  | 8   |
|           | Retaining ring               | V356-32283   |  | 1   |

|               |            |   |
|---------------|------------|---|
| Key (Code -2) | V034-70330 | 1 |
| Key (Code -5) | V034-66980 |   |
| 10            | VS24-40791 | 1 |
|               | VS24-40792 |   |
|               | VS24-63800 |   |
|               | VS24-63801 |   |
|               | VS24-26490 |   |
|               | VS24-26491 |   |

|  |                                    |            |
|--|------------------------------------|------------|
|  | Cartridge assembly 024 C.W. (P1)   | VS24-25891 |
|  | Cartridge assembly 024 C.C.W. (P1) | VS24-25892 |
|  | Cartridge assembly 028 C.W. (P1)   | VS24-10849 |
|  | Cartridge assembly 028 C.C.W. (P1) | VS24-10850 |
|  | Cartridge assembly 031 C.W. (P1)   | VS24-10851 |
|  | Cartridge assembly 031 C.C.W. (P1) | VS24-10852 |
|  | Cartridge assembly 035 C.W. (P1)   | VS24-10853 |
|  | Cartridge assembly 035 C.C.W. (P1) | VS24-10854 |
|  | Cartridge assembly 038 C.W. (P1)   | VS24-10855 |



|  |             |   |
|--|-------------|---|
|  | VS24-10856  |   |
|  | VS24-10857  |   |
|  | VS24-10858  |   |
|  | VS24-10859  |   |
|  | VS24-10860  |   |
|  | VS24-40236  |   |
|  | VS24-40237  |   |
|  | C-S14-71608 |   |
|  | C-S14-71609 |   |
|  | VS24-58160  | 1 |
|  | VS24-58161  |   |
|  | VS24-59677  |   |
|  | VS24-72348  |   |
|  | VS24-58162  |   |
|  | VS24-58163  |   |
|  | VS24-58164  |   |

|  |                                    |             |
|--|------------------------------------|-------------|
|  | Cartridge assembly 038 C.C.W. (P1) | VS24-58165  |
|  | Cartridge assembly 042 C.W. (P1)   | VS24-58166  |
|  | Cartridge assembly 042 C.C.W. (P2) | VS24-58167  |
|  | Cartridge assembly 045 C.W. (P1)   | VS24-58168  |
|  | Cartridge assembly 045 C.C.W. (P1) | VS24-58169  |
|  | Cartridge assembly 050 C.W. (P1)   | VS24-58170  |
|  | Cartridge assembly 050 C.C.W. (P1) | VS24-58171  |
|  | Cartridge assembly 061 C.W. (P1)   | VS24-58172  |
|  | Cartridge assembly 061 C.C.W. (P1) | VS24-58173  |
|  | Cartridge assembly 042 C.W. (P2)   | VS24-58174  |
|  | Cartridge assembly 042 C.C.W. (P2) | VS24-58175  |
|  | Cartridge assembly 045 C.W. (P2)   | VS24-58176  |
|  | Cartridge assembly 045 C.C.W. (P2) | VS24-58177  |
|  | Cartridge assembly 050 C.W. (P2)   | VS24-58178  |
|  | Cartridge assembly 050 C.C.W. (P2) | VS24-58195  |
|  | Cartridge assembly 061 C.W. (P2)   | C-S14-72173 |
|  | Cartridge assembly 061 C.C.W. (P2) | C-S14-72174 |

|         |                                    |             |    |
|---------|------------------------------------|-------------|----|
| 10a     | Port plate - rear C.W.             | V034-59810  | 2  |
|         | Port plate - rear C.C.W.           | V034-59811  |    |
| 10b     | Pin vane holdout                   | V034-59130  | 20 |
| 10c     | Vane                               | V034-53588  | 20 |
| 10d     | Cam ring - 014                     | V034-66708  | 2  |
|         | Cam ring - 017                     | V034-67028  |    |
|         | Cam ring - 020                     | V034-66596  |    |
|         | Cam ring - 024                     | V034-59294  |    |
|         | Cam ring - 028                     | V034-59133  |    |
|         | Cam ring - 031                     | V034-59135  |    |
|         | Cam ring - 035                     | V034-59137  |    |
|         | Cam ring - 038                     | V034-59139  |    |
|         | Cam ring - 042                     | V034-59132  |    |
|         | Cam ring - 045                     | V034-59131  |    |
|         | Cam ring - 050                     | V034-66737  |    |
|         | Cam ring - 061                     | V034-67127  |    |
| 10e     | Dowel pin                          | V03421612   | 4  |
| 10e     | Back-up ring                       | V620-15017  | 2  |
| 10g     | Pressure port plate C.W            | V034-59808  | 2  |
|         | Pressure port plate C.C.W          | V034-59809  |    |
| 10h     | Sq.section seal                    | V691-10232  | 2  |
| 10j     | Sq.section seal                    | V691-10244  | 2  |
| 10k     | Rotor-insert assy                  | VS24-10121  | 1  |
| 10l     | Rotor-insert assy                  | H-S24-51350 | 1  |
| 10m     | Screw                              | V317-10320  | 4  |
| 10n     | Lockwasher internal tooth          | V348-10010  | 4  |
| 10p     | Dowel pin                          | V323-82004  | 2  |
| 10q     | Bearing bush                       | V034-70868  | 1  |
| 10r,10s | Sq. section seal                   | V671-10159  | 2  |
|         |                                    |             |    |
|         | Cartridge assembly 003 C.W. (P3)   | VS24-10749  | 1  |
|         | Cartridge assembly 003 C.C.W. (P3) | VS24-10750  |    |
|         | Cartridge assembly 005 C.W. (P3)   | VS24-10751  |    |
|         | Cartridge assembly 005 C.C.W. (P3) | VS24-10752  |    |
|         | Cartridge assembly 006 C.W. (P3)   | VS24-10753  |    |
|         | Cartridge assembly 006 C.C.W. (P3) | VS24-10754  |    |
|         | Cartridge assembly 008 C.W. (P3)   | VS24-10755  |    |
|         | Cartridge assembly 008 C.C.W. (P3) | VS24-10756  |    |
|         | Cartridge assembly 010 C.W. (P3)   | VS24-10757  |    |
|         | Cartridge assembly 010 C.C.W. (P3) | VS24-10758  |    |
|         | Cartridge assembly 012 C.W. (P3)   | VS24-26482  |    |
|         | Cartridge assembly 012 C.C.W. (P3) | VS24-26483  |    |
|         | Cartridge assembly 014 C.W. (P3)   | VS24-10759  |    |
|         | Cartridge assembly 014 C.C.W. (P3) | VS24-10760  |    |
|         | Cartridge assembly 015 C.W. (P3)   | C-S14-72137 |    |

|     |                                    |             |    |
|-----|------------------------------------|-------------|----|
|     | Cartridge assembly 015 C.C.W. (P3) | C-S14-72138 |    |
|     | Cartridge assembly 017 C.W. (P3)   | VS24-10761  |    |
|     | Cartridge assembly 017 C.C.W. (P3) | VS24-10762  |    |
|     | Cartridge assembly 020 C.W. (P3)   | VS24-31023  |    |
|     | Cartridge assembly 020 C.C.W. (P3) | VS24-40032  |    |
|     | Cartridge assembly 022 C.W. (P3)   | VS24-10763  |    |
|     | Cartridge assembly 022 C.C.W. (P3) | VS24-10764  |    |
|     | Cartridge assembly 025 C.W. (P3)   | VS24-10765  |    |
|     | Cartridge assembly 025 C.C.W. (P3) | VS24-10766  |    |
|     | Cartridge assembly 028 C.W. (P3)   | VS24-25547  |    |
|     | Cartridge assembly 028 C.C.W. (P3) | VS24-25546  |    |
|     | Cartridge assembly 031 C.W. (P3)   | VS24-45771  |    |
|     | Cartridge assembly 031 C.C.W. (P3) | VS24-45772  |    |
|     |                                    |             |    |
| 11a | Port plate - rear C.W.             | V034-59776  | 1  |
|     | Port plate - rear C.C.W.           | V034-59777  |    |
| 11b | Pin vane holdout                   | V034-59098  | 10 |
| 11c | Vane                               | V034-59099  | 10 |
| 11d | Cam ring - 003                     | V034-59050  | 1  |
|     | Cam ring - 005                     | V034-59051  |    |
|     | Cam ring - 006                     | V034-59052  |    |
|     | Cam ring - 008                     | V034-59053  |    |
|     | Cam ring - 010                     | V034-59054  |    |
|     | Cam ring - 012                     | V034-66595  |    |
|     | Cam ring - 014                     | V034-59206  |    |
|     | Cam ring - 015                     | C-034-66893 |    |
|     | Cam ring - 017                     | V034-59207  |    |
|     | Cam ring - 020                     | V034-66607  |    |
|     | Cam ring - 022                     | V034-59208  |    |
|     | Cam ring - 025                     | V034-59209  |    |
|     | Cam ring - 028                     | V034-59245  |    |
|     | Cam ring - 031                     | V034-66843  |    |
|     |                                    |             |    |
| 11e | Dowel pin                          | V324-21208  | 2  |
| 11f | Back-up ring                       | V618-15016  | 1  |
| 11g | Port plate - pressure C.W.         | V034-59772  | 1  |
|     | Port plate - pressure C.C.W.       | V034-59773  |    |
| 11h | Sq. section seal                   | V691-10229  | 1  |
| 11j | Sq. section seal                   | V691-10238  | 1  |
| 11k | Screw                              | V317-06266  | 2  |
| 11m | Dowel pin                          | V323-82010  | 1  |
| 11n | Bearing bush                       | V034-59412  | 1  |
| 11p | Rotor-insert ass'y                 | VS24-10116  | 1  |
| 11q | Sq. section seal                   | V691-10156  | 1  |
|     |                                    |             |    |



# MODEL CODE

Series \_\_\_\_\_ VT6DDDCS - 042 - 035 - 010 - 1 R 00 - B 1 01 - \*

Series \_\_\_\_\_

| Cam ring | Displacement<br>in <sup>3</sup> /rev (cm <sup>3</sup> /rev) | Cam ring | Displacement<br>in <sup>3</sup> /rev (cm <sup>3</sup> /rev) |
|----------|---|----------|---|
| 014 =    | 2.90 (47.6)   | 035 =    | 6.80 (111.0)  |
| 017 =    | 3.55 (58.2)   | 038 =    | 7.30 (120.3)  |
| 020 =    | 4.00 (66.0)   | 042 =    | 8.30 (136.0)  |
| 024 =    | 4.80 (79.5)   | 045 =    | 8.90 (145.7)  |
| 028 =    | 5.50 (89.7)   | 050 =    | 9.64 (158.0)  |
| 031 =    | 6.00 (98.3)   | 061 =    | 11.62 (190.5)   |

| Cam ring | Displacement<br>in <sup>3</sup> /rev (cm <sup>3</sup> /rev) | Cam ring | Displacement<br>in <sup>3</sup> /rev (cm <sup>3</sup> /rev) |
|----------|---|----------|---|
| 003 =    | 0.66 (10.8)   | 015 =    | 3.08 (50.5)   |
| 005 =    | 1.05 (17.2)   | 017 =    | 3.56 (58.3)   |
| 006 =    | 1.30 (21.3)   | 020 =    | 3.89 (63.8)   |
| 008 =    | 1.61 (26.4)   | 022 =    | 4.29 (70.3)   |
| 010 =    | 2.08 (34.1)   | 025 =    | 4.84 (79.3)   |
| 012 =    | 2.26 (37.1)   | 028 =    | 5.42 (88.8)   |
| 014 =    | 2.81 (46.0)   | 031 =    | 6.10 (100.0)  |

Type of Shaft \_\_\_\_\_

- 1 = Keyed (SAE C)
- 2 = Keyed (SAE-CC)
- 3 = Splined (SAE -C)
- 4 = Splined (SAE- CC)
- 5 = Keyed (non SAE)

Notes :

Modification

Port connection variables  
SAE 4 bolt flange (J518c)

|                 |         |         |  |
|-----------------|---------|---------|--|
| P1 & P2 = 1"1/4 |         | S=4"    |  |
| Type            | UNC     | METRIC  |  |
| P3              | 1" 3/4" | 1" 3/4" |  |
| CODE            | 00 01   | MQ M1   |  |

Seal class

- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

Design letter

Porting combination  
(00 = Standard)

Direction of rotation  
R = Clockwise  
L = Counter - clockwise